

## Albert Nelson Prentiss.

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WITH PORTRAIT: PLATE XIX.

Albert Nelson Prentiss was born May 22, 1836, at Cazenovia, Oneida county, N. Y. His father was a farmer, and his grandfather was an officer in the war of 1812, dying in the service.

His early education was gained in the public schools, and in the Oneida County Seminary of his native village. In 1858 he entered the Michigan State Agricultural College and was graduated in 1861 with the degree of B. S. His class, numbering seven members, was the first to graduate from that institution, and the entire class, responding to their country's call at the outbreak of the civil war, immediately enlisted in the service of the army. Albert N. Prentiss was enlisted in the engineering corps at Battle Creek, Mich., and assigned to special signal service duty in the army of the west. After four months service, principally in the field, in the interior of Missouri, his corps was disbanded in consequence of changes in the organization of the army which followed the removal of the commanding general.

In 1862 he was elected associate principal of the Kalamazoo, Mich., high school, which position he resigned during the following year to accept the instructorship of botany and horticulture in his alma mater, the Michigan Agricultural College at Lansing. He received the degree of M. S. from the same institution in 1864, and in 1865 he was promoted to the full professorship of botany and horticulture.

Aside from the duties appertaining to the educational features of the department he had charge of the grounds of the campus, and under his direction the face of the campus soon changed from the formal association of straight lines and angles to the place of beauty which it now is.

Among his pupils in botany at the Michigan Agricultural College are the following men whose lives have been devoted to the science and who have attained positions of eminence in their chosen fields: C. E. Bessey, professor of botany in the University of Nebraska; W. P. Wilson, professor of bot-

any in the University of Pennsylvania; B. D. Halsted, professor of botany in Rutgers College, and botanist of the New Jersey Agricultural Experiment Station; S. M. Tracy of the Mississippi Agricultural College, director and botanist of the Mississippi Agricultural Experiment Station.

At the opening of Cornell University in 1868 he was called to the chair of botany, arboriculture and horticulture. The botanical department for several years did not have rooms devoted entirely to the work in botany, but made use of rooms at intervals when they were not occupied by other classes, and there was, therefore, a lack of room for carrying on desired laboratory work, as there was also at that time lack of suitable apparatus or illustrative material. The first course offered was in systematic botany during the autumn of the opening of the university in 1868. This was attended by four students who came from other institutions and who had some previous training in botany, the lectures being given in what is known as Morrill Hall. In the spring term the department was assigned two small rooms in a wooden building which had just been completed, more especially for the chemical and physical departments, neither of which rooms was large enough for the class of 144 students who attended the elementary course in the spring term. The lectures to this class were given in the chemical lecture room, where they were held for three years. For a number of years the members of this large class, through his influence, became interested in the local flora, and this led ultimately through the enthusiasm of such men as Dr. D. S. Jordan, now president of Leland Stanford, Jr., University, Dr. J. C. Branner and Professor W. R. Dudley, of the same institution, to a careful and systematic study of the interesting flora of this region, and the publication later by Professor Dudley of the *Cayuga Flora*. In 1875 the department was moved to more commodious and permanent quarters in the south wing of the Sage College, and the equipment in the way of models and other illustrative material had by this time considerably increased, and some other courses were offered. In 1873 an instructor, David S. Jordan, was for the first time appointed, and in the following year W. R. Dudley was appointed instructor, and continued to occupy this position until promoted to the assistant professorship in 1876-77. In 1881 the laboratory was further extended, and a large conservatory was erected in connection with the department.

For more than a decade in the early history of the university the entire oversight of the large grounds of Cornell University fell to the lot of the professor of botany, and to those who know anything of the wild condition of the grounds at that time the duties of this position will not seem small. In fact a large part of the time of Professor Prentiss during the early years was given to personal supervision of the improvement of the grounds and the planting of trees, many of the summer vacations as well as the spare time obtained from the instruction being devoted entirely to this work. One of the first plans projected by him for the improvement of the grounds was the starting of a small nursery of native plants, the seeds of which were planted at the opening of the university. Owing to lack of funds for the care of this nursery most of the young plants were lost, but a few were planted on the campus, and would thus, if protected, be of the same age as the university. Most of these trees in one way and another have disappeared, chiefly through the rapid expansion of the university beyond what was anticipated at the outset, so that they have largely been removed to give place to new buildings, to subsequent gradings of the grounds, etc. Of the number of these trees planted at that time it may be interesting to the friends of the university to know, that, so far as can be determined, only three pine trees remain, one situated on the Sage College grounds about 100 feet south of the botanical laboratory, while the other two are in the grounds of the residence of Professor J. H. Comstock, at the north end on East avenue.

In the summer and autumn of 1870 Professor Prentiss was absent in Brazil with what is usually spoken of as the "Cornell Exploring Expedition." In university history this expedition is usually known as the "Morgan Expedition" in honor of the Hon. Edwin Barber Morgan of Aurora, N. Y., who contributed a considerable sum toward the cost. The expedition was organized by Professor C. F. Hartt, at that time professor of geology, for the purpose of making collections in natural history and studying the natural resources of the country. A number of students accompanied Professors Hartt and Prentiss. The party sailed from New York the latter part of June, returning early in January, 1871. They explored the valley of the Amazon for a distance of about 400 miles above Pará, as well as the rivers Chingu and Tapajos, two of

the principal tributaries of the Amazon. This gave Professor Prentiss an excellent opportunity to study the tropical flora and also to make some collections of material for the department. He also spent some time in Rio Janeiro and in other parts of Brazil.

In 1872 he spent six months in Europe devoting the largest share of his time to the Royal Botanic Gardens at Kew, London, and the Jardin des Plantes at Paris. Subsequent visits were made to Europe and a large number of the more important botanic gardens were visited and studied. In 1878 he was married to Miss Adaline Eldred, and having no children his wife has been able to accompany him in many of his travels.

During his connection with the department at Cornell many students have come under his direct influence, and doubtless a large number have received from his instruction an inspiration to become botanists or teachers of botany. Among the more prominent botanists who have at one time or another been students of his at Cornell may be mentioned the following: J. C. Arthur, professor of vegetable physiology at Purdue University; F. V. Coville, chief of the Division of Botany of the U. S. Department of Agriculture; W. R. Dudley, professor of botany in the Leland Stanford Jr., University; R. B. Hough, author of *American Woods*; J. A. Holmes, formerly professor of botany and geology in the University of North Carolina, now state geologist; W. A. Kellerman, professor of botany in the Ohio State University; W. R. Lazenby, formerly professor of botany, now professor of horticulture in the Ohio State University; C. W. Mathews, professor of horticulture and botany in the State College of Kentucky; V. A. Moore, bacteriologist of the Bureau of Animal Industry of the U. S. Department of Agriculture; C. F. Millspaugh, botanist to the Field Columbian Museum of Chicago; W. W. Rowlee, assistant professor of botany in Cornell University; W. Trelease, professor of botany in Washington University and director of the Missouri Botanical Garden; M. B. Thomas, professor of botany in Wabash College; R. Yatabe, professor of botany and curator of the botanic garden, University of Tokio.

Professor Prentiss' writings upon botanical subjects have been few. In 1871 he wrote an essay on the "Mode of the natural distribution of plants over the surface of the earth,"

which received the first Walker prize by the Boston Society of Natural History, and was published in pamphlet form (University Press, Ithaca, N. Y., 1872). Minor contributions have been made to some of the American botanical journals.

The most extended piece of botanical writing which Professor Prentiss accomplished has unfortunately not yet been published. This was a monograph of the hemlock, *Tsuga Canadensis*, for the Division of Forestry of the U. S. Department of Agriculture. The monograph was one of a series upon certain of our coniferous trees, prepared at the request of the chief of the Division of Forestry,<sup>1</sup> Mr. B. E. Fernow, by different authors. Professor V. M. Spalding made the monograph on the white pine, Dr. Chas. Mohr on the southern pines, Mr. Flint on *Pinus resinosa, rigida*, etc., and Professor Prentiss on the hemlock. According to certain financial requirements of the department at Washington, the time for the delivery of the monographs was extremely limited, so that when they were presented at the expiration of this limit, they were all necessarily short in observations of a kind which are needed to formulate rules for forestry practice, especially measurements at various stages of development not only of single trees but of groups in the forest. For this reason none of these monographs were printed at that time, and only now is the department in a position to publish Dr. Mohr's monograph, to be followed by the others in turn. These monographs included statistics of area and consumption, with a history of the economic development of timber supplies; brief botanical descriptions, including studies on wood structure, biology, the requirements of the species for its development, the progress through various stages of growth, etc., etc. Professor Prentiss' monograph was among the best, and very well put together, but was, like the rest, deficient in the respects mentioned.

The fact that his productiveness has not manifested itself in more frequent and pretentious contributions upon botanical topics may have seemed surprising to those who have not understood the conditions under which Professor Prentiss has labored. During the early history of the University the organization of a department when funds were not sufficient to at once build and equip suitable rooms for the large num-

<sup>1</sup> I am greatly indebted to the kindness of Mr. Fernow for these facts concerning the conifer monographs. G. F. A.

ber of students, the exacting duties as superintendent of the grounds for the larger part of his connection with the University, where constant personal supervision was necessary in connection with the improvement and care of 50 to 100 acres, was sufficient, with the duties as teacher, for a number of years without any assistance, to prevent the planning and carrying out of any extended investigations. During the later years, failing health, while it did not prevent him from attendance upon the duties of instruction and administration of his office, did not leave him sufficient reserve strength for the close and continued application necessary in conducting extended experiments or prolonged research. Punctilious to a fault in meeting his appointments, he rarely missed any of his classes, even when suffering from an indisposition which would have warranted an occasional respite. But during the last two years illness has at several times compelled him to give up all work for short periods, though he would return to work again when convalescent, and in such a state of health which would have constrained others to absent themselves longer from duty. But in the winter of 1896 he found it necessary in order that his health might be cared for to ask to be relieved from further active participation in the administration of the department.

At the winter meeting of the Board of Trustees he was elected professor emeritus in recognition of his long and faithful services to the University, and the faculty attested by appropriate resolutions the esteem in which he has always been held by his colleagues, and the value of his services and influence in the early history of the University, when it required men of strong faith and firm principles to stand up for the new and advanced ideals upon which Cornell University was founded.

Professor Prentiss is dignified and gentle. In his lectures he was a clear, precise, easy and fluent speaker, and in conversation a most delightful companion. To those who were not intimately acquainted with him he often seemed cold and unsympathetic, but those who knew him well, felt the charm of his manner and encouragement of his keen interest in the individual work of the student. As a pupil of Professor Prentiss the writer felt no restraint upon the most cordial relationship, and always experienced an exquisite delight in the personal discussions upon various topics connected with the lec-

tures or investigations, and came to regard him more in the light of a dear friend than as a teacher. Later when he was associated with him as a colleague, the same deep interest in success and approval of research work characterized his relation to his former pupil. Cultivated and refined, his influence upon his pupils, upon his home, and in social life, has been alike gentle and elevating, and all his friends will sincerely wish that he may recover from the present trying illness, and be spared many years in the enjoyment of needed rest after a long period of active and exacting labors.

*Ithaca, N. Y.*